

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in this application.

Listing of Claims:

1. (CURRENTLY AMENDED) A solid detergent composition comprising:

(a) an effective amount of a cleaning agent to provide soil removal, wherein the cleaning agent comprises about 0.1 wt.% to about 20 wt.% of a surfactant based on the weight of the solid detergent composition, and about 1 wt.% to about 50 wt.% phosphonate, amino-carboxylate, or mixture thereof based on the weight of the detergent composition; at least one of:

- (i) ~~surfactant;~~
- (ii) ~~source of alkalinity;~~
- (iii) ~~water conditioning agent; or~~
- (iv) ~~enzyme;~~

(b) an effective amount of a binding agent dispersed throughout the solid detergent composition to provide the detergent composition as a solid ~~at room temperature~~ at a temperature up to about 100° F within about 20 minutes of extrusion, the binding agent comprising a result of mixing:

- (i) about 10 wt.% to about 80 wt.% alkali metal carbonate, based on the weight of the detergent composition;
- (ii) about 1 wt.% to about 40 wt.% alkali metal bicarbonate, based on the weight of the detergent composition; and
- (iii) a sufficient amount of water to react with the alkali metal carbonate and the alkali metal bicarbonate;

wherein the solid detergent composition is provided as an extruded solid as a result of a step of hardening.

2. (ORIGINAL) A solid detergent composition according to claim 1, wherein the binding agent comprises alkali metal sesquicarbonate.

3. (ORIGINAL) A solid detergent composition according to claim 1, wherein at least a portion of said alkali metal bicarbonate is provided as a reaction product of alkali metal carbonate and acid.
4. (ORIGINAL) A solid detergent composition according to claim 1, wherein the composition further comprises a builder comprising sodium tripolyphosphate, sodium nitrilotriacetate, or mixtures thereof.
5. (CANCELED)
6. (CURRENTLY AMENDED) A solid detergent composition according to claim 1, wherein the ~~cleaning agent~~ surfactant comprises ~~a surfactant comprising~~ at least one of a nonionic surfactant, an anionic surfactant, ~~and~~ or a mixture thereof.
7. (CANCELED)
8. (CANCELED)
9. (CANCELED)
10. (ORIGINAL) A solid detergent composition according to claim 1, wherein the composition is in the form of a pellet.
11. (ORIGINAL) A solid detergent composition according to claim 1, wherein the solid composition is in the form of a block.
12. (CANCELED)
13. (ORIGINAL) A solid detergent composition according to claim 1, wherein the solid composition is in the form of a cast solid.

14. (CURRENTLY AMENDED) A method for solidifying a detergent composition, the method comprising:

(a) mixing an effective amount of a cleaning agent to provide soil removal and an effective amount of a binding agent to solidify the detergent composition to form a mixture, the cleaning agent comprising about 0.1 wt.% to about 20 wt.% of a surfactant based on the weight of the solid detergent composition, and about 1 wt.% to about 50 wt.% phosphonate, amino-carboxylate, or mixture thereof based on the weight of the detergent composition, at least one of:

- (i) ~~surfactant;~~
- (ii) ~~source of alkalinity;~~
- (iii) ~~water conditioning agent; or~~
- (iv) ~~enzyme;~~

the binding agent comprising a result of mixing:

- (i) about 10 wt.% to about 80 wt.% alkali metal carbonate, based on the weight of the detergent composition;
 - (ii) about 1 wt.% to about 40 wt.% alkali metal bicarbonate, based on the weight of the detergent composition; and
 - (iii) a sufficient amount of water to react with the alkali metal carbonate and the alkali metal bicarbonate;
- (b) extruding the mixture; and
- (c) hardening the mixture to form the solid detergent composition having a melting temperature greater than 100° F within about 20 minutes of extruding the mixture.

15. (ORIGINAL) A method according to claim 14, further comprising a step of:

- (a) generating alkali metal bicarbonate by reacting alkali metal carbonate with acid.

16. (ORIGINAL) A method according to claim 15, wherein the acid comprises at least one of citric acid, sulfamic acid, adipic acid, succinic acid, and mixtures thereof.

17. (ORIGINAL) A method according to claim 14, wherein the binding agent comprises alkali metal sesquicarbonate.

18-19. (CANCELED)

20. (ORIGINAL) A method according to claim 14, further comprising a step of:

- (a) packaging the mixture of cleaning agent and binding agent.

21. (CANCELED)

22. (CURRENTLY AMENDED) A method according to claim 14, wherein the step of ~~easting or~~ extruding the mixture comprises extruding the mixture into a pellet.

23. (CURRENTLY AMENDED) A method according to claim 14, wherein the step of ~~easting or~~ extruding the mixture comprises extruding the mixture into a block.

24-25. (CANCELED)

26. (CURRENTLY AMENDED) A solid detergent composition comprising:

- (a) an effective amount of a cleaning agent to provide soil removal, wherein the cleaning agent comprises about 0.1 wt.% to about 20 wt.% of a surfactant based on the weight of the solid detergent composition, and about 1 wt.% to about 50 wt.% phosphonate, amino-carboxylate, or mixture thereof based on the weight of the detergent composition; at least one of:

- (i) ~~surfactant;~~
- (ii) ~~source of alkalinity;~~
- (iii) ~~water conditioning agent; or~~
- (iv) ~~enzyme;~~

- (b) an effective amount of a binding agent dispersed throughout the solid detergent composition to provide the detergent composition as a solid ~~at room temperature~~ at a temperature up to about 100° F within about 20 minutes of extrusion, the binding agent comprising a result of mixing:

- (i) about 10 wt.% to about 80 wt.% alkali metal carbonate, based on the weight of the detergent composition;

- (ii) about 1 wt.% to about 40 wt.% alkali metal bicarbonate, based on the weight of the detergent composition;
- (iii) alkali metal sesquicarbonate; and
- (iv) a sufficient amount of water to react with the alkali metal carbonate and the alkali metal bicarbonate;

wherein the solid detergent composition is provided as an extruded solid in the form of a block as a result of a step of hardening.

27. (CURRENTLY AMENDED) A method for solidifying a detergent composition, the method comprising:

(a) mixing an effective amount of a cleaning agent to provide soil removal and an effective amount of a binding agent to solidify the detergent composition, the cleaning agent comprising about 0.1 wt.% to about 20 wt.% of a surfactant based on the weight of the solid detergent composition, and about 1 wt.% to about 50 wt.% phosphonate, amino-carboxylate, or mixture thereof based on the weight of the detergent composition, ~~at least one of:~~

- (i) ~~surfactant~~;
- (ii) ~~source of alkalinity~~;
- (iii) ~~water conditioning agent~~; or
- (iv) ~~enzyme~~;

the binding agent comprising a result of mixing:

- (i) about 10 wt.% to about 80 wt.% alkali metal carbonate, based on the weight of the detergent composition;
 - (ii) about 1 wt.% to about 40 wt.% alkali metal bicarbonate, based on the weight of the detergent composition;
 - (iii) alkali metal sesquicarbonate; and
 - (iv) a sufficient amount of water to react with the alkali metal carbonate and the alkali metal bicarbonate;
- (b) extruding the mixture to form a block; and
- (c) hardening the mixture to form the solid detergent composition having a melting temperature greater than 100° F within about 20 minutes of extruding the mixture.

28. (NEW) A solid detergent composition according to claim 1, wherein the solid composition is provided as a result of extrusion into a packaging.

Support for the Amendment:

The specification is amended at pages 6 and 7 to replace the term "amino-acetates" with "amino-carboxylates." This amendment is supported by original claim 5 and more accurately describes the components identified by the specification at page 7, lines 18-20.

Independent claims 1, 14, 26, and 27 are amended to provide for the presence of about 0.1 wt.% to about 20 wt.% of a surfactant based on the weight of the solid detergent composition, and about 1 wt.% to about 50 wt.% phosphonate, amino-carboxylate, or mixture thereof based on the weight of the detergent composition. This amendment is supported by the specification at page 4, line 1 through page 5, line 28, and page 6, line 25 through page 7, line 23.

Independent claims 1, 14, 26, and 27 are amended to provide that the ranges of alkali metal carbonate and alkali metal bicarbonate identified in the claims are based on the weight of the detergent composition. This amendment is supported by the context of the specification at, for example, page 21, lines 15-19. It is clear from this portion of the specification that the weight percent ranges are identified for the solid detergent composition.

Independent claims 1, 14, 26, and 27 are amended to characterize the detergent composition as a solid at a temperature up to about 100° F or to characterize the solid as having a melting temperature of greater than about 100° F. This amendment is supported by the specification at, for example, page 3, lines 3-21.

The amendment cancels claims 5, 8, 9, and 21.

Claim 6 is amended to refer to the surfactant of claim 1 and to more clearly indicate that the identified surfactants are provided in the alternative.

Claims 22 and 23 are amended to remove reference to "casting" in view of the previous amendment to claim 14 that removed "casting." Claims 22 and 23 are now consistent with amended claim 14.

New claim 28 is supported by the specification at, for example, page 29, lines 1-13.

No new matter is introduced by this amendment, and entry thereof is requested. Upon entry, claims 1-4, 6, 10, 11, 13-17, 20, 22, 23, 26, and 27 are active in this application.